

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A rewritable optical data storage medium (20) for high-speed recording by means of a focused radiation beam (10), said medium comprising a substrate (7) carrying a stack (2) of layers, which wherein the stack comprises, comprises:

a substantially transparent first auxiliary layer I1 (3),  
a substantially transparent second auxiliary layer I2 (5) having a thickness  $d_{I2}$ , and

a recording layer (4) of a phase-change material comprising a composition  $Ge_xSn_ySb_{1-x-y}$ , where  $0.05 < x < 0.30$  and  $0.15 < y < 0.30$ , which wherein the recording layer is interposed between the first auxiliary layer I1 and the second auxiliary layer I2, and

a third auxiliary layer I3 (6) with a thickness  $d_{I3}$  acting as a

heat sink and being present at a side of I2 opposite to the side of , wherein the second auxiliary layer I2 is interposed between the recording layer and the third auxiliary layer I3, characterized in that

wherein  $\lambda_{I2}/d_{I2} > 5 \times 10^8 \text{ W m}^{-2} \text{ K}^{-1}$ , in which formula where  $\lambda_{I2}$  is the a heat conduction coefficient of the material of the I2 layer second auxiliary layer I2.

2. (Currently Amended) An The optical data storage medium (20) as claimed in claim 1, wherein the second auxiliary layer I2 mainly comprises  $(\text{ZnS})_{80}(\text{SiO}_2)_{20}$  and the thickness  $d_{I2} < 10 \text{ nm}$ .

3. (Currently Amended) An The optical data storage medium (20) as claimed in claim 1, wherein the second auxiliary layer I2 comprises at least one selected from the group of  $\text{Ge}_3\text{N}_4$ ,  $\text{Si}_3\text{N}_4$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{Hf}_x\text{N}_y$ , ITO ( $\text{In}_2\text{O}_3:\text{Sn}$ ) and  $\text{Ta}_2\text{O}_5$ .

4. (Currently Amended) An The optical data storage medium (20) as claimed in claim 1, wherein the recording layer (4) has a

thickness  $d_p$  and  $d_p$  which is smaller than 15 nm.

5. (Currently Amended) An The optical data storage medium (20) as claimed in claim 1, wherein the recording layer additionally comprises at least one selected from of In, Ag or and Cu.

6. (Currently Amended) An The optical data storage medium (20) as claimed in claim 5, wherein the at least one In, Ag and Cu is present in a concentration up to 10 at.%.

7. (Currently Amended) An The optical data storage medium (20) as claimed in claim 1, wherein the third auxiliary layer I3 mainly comprises Ag.

8. (Currently Amended) An The optical data storage medium (20) as claimed in claim 7, wherein the thickness  $d_{i3}$  of the third auxiliary layer I3 is at least 150 nm.

9. (Currently Amended) An The optical data storage medium (20)

as claimed in claim 1, wherein further comprising a substantially transparent fourth auxiliary layer I4 ~~(8)~~ is present between the third auxiliary layer I3 ~~(6)~~ and the second auxiliary layer I2 ~~(5)~~ for screening the third auxiliary layer I3 from a chemical influence of the second auxiliary layer I2.

10. (Currently Amended) An The optical data storage medium as claimed in claim 9, wherein the fourth auxiliary layer I4 ~~(8)~~ comprises at least one of  $\text{Si}_3\text{N}_4$  or and  $\text{Ge}_3\text{N}_4$ .

11. (Currently Amended) An The optical data storage medium as claimed in claim 10, wherein the fourth auxiliary layer I4 has a thickness  $d_{I4} \leq 3$  nm.

Claim 12 (Canceled)